

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Brian G. Van Ness et al.

Art Unit : Unknown

Serial No.: 10/532,040

Examiner: Unknown

Filed

: December 30, 2005

Conf. No.: 9035

Title

: TRANSGENIC NON-HUMAN ANIMALS WITH EXPANDED MATURE B

CELL AND PLASMA CELL POPULATIONS

## MAIL STOP AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## INFORMATION DISCLOSURE STATEMENT

Applicants request consideration of the references listed on the attached PTO-1449 form. Under 37 C.F.R. § 1.98 (a)(2)(ii), only copies of foreign patent documents and/or non-patent literature are enclosed. Copies of any listed U.S. patents or U.S. patent application publications can be provided upon request.

This statement is being filed before the receipt of a first Office Action on the merits. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: October 6, 2006

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I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Sheet	1	of	4
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Substitute Form PT 449 (Modified)

S. Department of Commerce Patent and Trademark Office Attorney's Docket No. 09531-109US1

December 30, 2005

Application No. 10/532,040

Information Disclosure Statement by Applicant

(Use several sheets if necessary)

Applicant

Brian G. Van Ness et al.

Filing Date

Group Art Unit

(37 CFR §1.98(b))

**U.S. Patent Documents** Examiner Document Desig. Publication Filing Date Initial ID Number Date Class If Appropriate Patentee Subclass AA4,873,191 10/10/89 Wagner et al. AB 5,202,429 04/13/93 Tsujimoto et al. AC 5,360,893 11/01/94 Owens et al. AD 5,545,806 08/13/96 Lonberg et al. ΑE 5,625,126 04/29/97 Lonberg et al. AF 5,646,008 07/08/97 Thompson et al. 08/26/97 AG 5,661,016 Lonberg et al. 5,770,429 06/23/98 AH Lonberg et al. ΑI 5,814,318 09/29/98 Lonberg et al. ΑJ 5,885,827 03/23/99 Wabl et al. ΑK 6,255,458 07/03/01 Lonberg et al. AL6,300,129 10/09/01 Lonberg et al. AM

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner	Desig.	Document	Publication	Country or			Trans	slation
Initial	ID	Number	Date	Patent Office	Class	Subclass	Yes	No
	AN							

(	Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document	
	AO	GenBank Accession No. L20121, dated October 5, 1993	
	AP	GenBank Accession No. L35049, dated October 29, 1994	
	AQ	GenBank Accession No. NM_002524, dated August 27, 2006	
	AR	GenBank Accession No. X00364, dated June 3, 2002	
	AS	GenBank Accession No. X15878, dated September 9, 2004	
	AT	GenBank Accession No. Z23115, dated July 26, 1994	

Exam	iner	Sign	ature

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S. Department of Commerce Patent and Trademark Office

Attorney's Docket No. 09531-109US1

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	Other D	ocuments (include Author, Title, Date, and Place of Publication)
Examiner Initial	Desig. ID	Document
	AU	"NiceSite View of PROSTITEA; PDOC00829 (documentation) Apoptosis regulator proteins, Bcl-2 family BN domains signatures/profiles" [online]. Hosted by SIB Switzerland, [retrieved on 2002-10-18]. Retrieved from the Internet: <url: <a="" href="www.expasy.org/cgi-bin/prosite-search-ac?PDOC00829">www.expasy.org/cgi-bin/prosite-search-ac?PDOC00829&gt;</url:>
	AV	Adams and Cory, "The Bcl-2 Protein Family: Arbiters of Cell Survival," Science, 1998, 281:1322-1326
	AW	Adams et al., "The c-myc onocogene driven by immunoglobulin enhancers induces lymphoid malignancy in transgenic mice" Nature, 1985, 318:533-538
	AX	Banerji et al., "A lymphocyte-specific cellular enhancer is located downstream o the joining region in immunoglobulin heavy chain genes" Cell, 1983, 33:729-740
	AY	Bateman et al., "The Pfam Protein Families Database," Nucleic Acids Res., 2002, 30:276-280
	AZ	Burns et al., "IL-2-based immunotherapy after autologous transplantation for lymphoma and breast cancer induces immune activation and cytokine release: a phase I/II trial" Bone Marrow Transplant., 2003, 32:177-186
	AAA	Cardiff et al., "Multiple Tumor Types Appear in a Transgenic Mouse with RAS Oncogene" Am. J. Path., 1993, 142:1199-1207
	ABB	Cheung et al. "Novel targeted deregulation of c-Myc cooperates with Bcl-X <sub>L</sub> to cause plasma cell neoplasms in mice" The Journal of Clinical Investigation, 2004, 113(12):1763-1773
	ACC	Cibelli et al., "Cloned Transgenic Calves Produced from Nonquiescent Fetal Fibroblasts," Science, 1998, 280:1256-1258
	ADD	Cory and Adams, "The BCL2 Family: Regulators of the Cellular Life-or-Death Switch" Nature Reviews, 2002, 2:647-656
	AEE	Fang et al., "Frequent Aberrant Immunolglobulin Gene Rearrangements in Pro-B Cells Revealed by a bcl-xL Transgene," Immunity, 1996, 4:291-299
	AFF	Fang et al., "Self-reactive B lymphocytes overexpressing Bcl-xL escape negative selection and are tolerized by clonal anergy and receptor editing," Immunity, 1998, 9(1):35-45
	AGG	Fang et al., "Cloning and Molecular Characterization of Mouse bcl-x in B and T Lymphocytes" <u>J. Immunol.</u> , 1994, 153:4388-4398
	АНН	Fennell et al., "In vivo suppression of Bcl-XL expression facilitates chemotherapy-induced leukaemia cell death in a SCID/NOD-Hu Model," Br. J. Haematol., 2001, 1112(3):706-713
	AII	Frankel et al., "Modulation of the apoptotic response of human myeloid leukemia cells to a diptheria toxin granulocyte-macrophage colony-stimulating factor fusion protein," <u>Blood</u> , 1997, 90(9):3654-3661
	AJJ	Fulton and Van Ness, "Selective synergy of immunoglobin enhancer elements in B-cell development: a characteristic of kappa light chain enhancers, but not heavy chain enhancers," <u>Nucl. Acids Res.</u> , 1994, 22:4216-4123
	AKK	Fulton and Van Ness, "Kappa immunoglobin promoters and enhancers display developmentally controlled interactions," Nucleic Acids Res., 1993, 21:4941-4947
	ALL	Gillies et al., "A Tissue-specific Transcription Enhancer Element is Located in the Major Intron of a Rearranged Immunoglobulin Heavy Chain Gene" Cell, 1983, 33:717-728
	AMM	Grillot et al., "bcl-x Exhibits Regulated Expression During B Cell Development and Activation and Modulates Lymphocyte survival in Transgenic Mice," <u>The Journal of Experimental Medicine</u> , 1996, 183:381-391

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Other Documents (include Author, Title, Date, and Place of Publication)				
Examiner	Desig.			
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	ANN	Gross et al., "BCL-2 family members and the mitochondria in apoptosis," <u>Genes Dev.</u> , 1999, 13:1899-1911		
	AOO	Grosschedl and Baltimore, "Cell-Type Specificity of Immunoglobulin Gene Expression is Regulated by at Least Three DNA Sequence Elements" Cell, 1985, 41:885-897		
	APP	Grossmann et al., "The anti-apoptotic activities of Rel and RelA required during B-cell maturation involve the regulation of Bcl-2 expression," EMBO J., 2000, 199(23):6351-6360		
	AQQ	Guatelli et al., "Isothermal, in vitro amplification of nucleic acids by a multienzyme reaction modeled after retroviral replication," <u>Proc. Natl. Acad. Sci. USA</u> , 1990, 87:1874-1878		
	ARR	Harris et al., "Effect of a bcl-2 transgene on production and localization of precursor B cells in mouse bone marrow," Exp. Hematol., 1998, 26(10):982-990		
	ASS	Hentunen et al., "Characterization of Immortalized Osteoclast Precursors Developed from Mice Transgenic for Both bcl-XL and Simian Virus 40 Large T Antigen," <u>Endocrinology</u> , 1999, 140(7):2954-2961		
	ATT	Ibrado et al., "Bcl-xL overexpression inhibits taxol-induced Yama protease activity and apoptosis," Cell Growth & Differentiation, 1996, 7(8):1087-1094		
	AUU	Kaisho et al., "IkappaB kinase alpha is essential for mature B cell development and function," <u>J.</u> Exp. Med., 2001, 193(4):417-426		
	AVV	Kaluzhny et al., "BclxL overexpression in megakaryocytes leads to impaired platelet fragmentation," Blood, 2002, 100(5):1670-1678		
	AWW	Levin et al., "A dominant-negative transgene defines a role for P56 <sup>lck</sup> in thymopoiesis" <u>EMBO J.</u> , 1993, 12:1671-1680		
	AXX	Lewis, "PCR's Competitors Are Alive and Well and Moving Rapidly Towards Commercialization," Genetic Engineering News, 1992, 12:1		
	AYY	Linden et al. "Targeted overexpression of Bcl-X <sub>L</sub> in B-lymphoid cells results in lymphoproliferative disase and plasma cell malignancies" <u>Blood</u> , 2004, 103(7):2779-2786		
	AZZ	Linden et al. "ABL-MYC retroviral infection elicits bone marrow plasma cell tumors in Bcl-X <sub>L</sub> transgenic mice" <u>Leukemia Research</u> , 2005, 29:435-444		
	AAAA	Liu et al., "Induced κ Receptor Editing Shows No Allelic Preference in a Mouse Pre-B Cell Line <sup>1</sup> , " <u>J. Immunol.</u> , 2000, 165:7058-7063		
	ABBB	Lo, "Transformation by Iontophoretic Microinjection of DNA: Multiple Integrations Witohout Tandem Insertions," Mol. Cell. Biol., 1983, 3:1803-1814		
	ACCC	Merino et al., "Developmental regulation of the Bcl-2 protein and susceptibility to cell death in B lymphocytes," EMBO J., 1994, 13(3):683-689		
	ADDD	Meyer and Neuberger, "The immunoglobulin $\chi$ locus contains a second, stronger B-cell-specific enhancer which is located downstream of the constant region," EMBO J., 1989, 8:1959-1964		
	AEEE	Meyer, "Induction of the lgx 3' enhancer by distinct pathways can be inhibited by cross-linking of the CD40 receptor," Eur. J. Immunol., 1999, 29:872-877		
	AFFF	O'Brien et al., "Coordinate Transcription and V(D)J Recombination of the Kappa Immunoglobin Light-Chain Locus: NF-κB-Dependent and -Independent Pathways of Activation," Mol. Cell. Biol., 1997, 17:3477-3487		
	AGGG	Ong et al., "Lymphadenopathy, splenomegaly, and altered immunoglobulin production in BCL3 transgenic mice.," Oncogene, 1998, 16(18):2333-2343		

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Substitute Form PTO-14 U.S. Department of Commerce (Modified)

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	АННН	O'Reilly et al., "Expression of a bcl-2 transgene reduces proliferation and slows turnover of developing B lymphocytes in vivo," <u>J. Immunol.</u> , 1997, 159(2):2301-2311
	AIII	Robertson, "Genentech awarded critical antibody patent," Nature Biotechnology, 2002, 20:108
	AJJJ	Rodriquez et al., "An early and massive wave of germinal cell apoptosis is required for the development of functional spermatogenesis," EMBO J., 1997. 16(9):2262-2670
	AKKK	Rothstein et al., "Receptor-specific regulation of B-cell susceptibility to Fas-mediated apoptosis and a novel Fas apoptosis inhibitory molecule," <u>Immunol. Rev.</u> , 2000, 176:116-133
	ALLL	Rothstein, "Inducible resistance to Fas-mediated apoptosis in B cells," Cell Res., 2000, 10(4):245-266
	AMMM	Sambrook et al., "Molecular Cloning, A Laboratory Manual," 1989, Sections 9.37-9.52, 2nd Ed., Cold Spring Harbor Press, Plainview; NY
	ANNN	Schmidt et al., "Transgenic mice bearing the human c-myc gene activated by an immunoglobin enhancer: A pre-B-cell lymphoma model," Proc. Natl. Acad. Sci. USA, 1988, 85:6047-6051
-	A000	Short Protocols in Molecular Biology, 1992, Chapter 11, Green Publishing Associates and John Wiley & Sons, ed. Ausubel et al.
	APPP	Strasser et al., "E mu-bcl-2 transgene facilitates spontaneous transformation of early pre-B and immunoglobulin-secreting cells but not T cells," Oncogene, 1993, 8(1):1-9
	AQQQ	Strasser et al., "Novel primitive lymphoid tumours induced in transgenic mice by cooperation between myc and bcl-2," Nature, 1990, 348(6299):331-333
	ARRR	Takahashi et al., "Relaxed Negative Selection in Germinal Centers and Impaired Affinity Maturation in bcl-xL Transgenic Mice," J. Exp. Med., 1999, 190(3):399-409
	ASSS	Thompson et al., "Germ Line Transmission and Expression of a Corrected HPRT Gene Produced by Gene Targeting in Embryonic Stem Cells," Cell, 1989, 56:313-321
	ATTT	Tsujimoto, "Overexpression of the human BCL-2 gene product results in growth enhancement of Epstein-Barr virus-immortalized B cells," Proc Natl Acad Sci. USA, 1989, 86(6):1958-1962
	AUUU	Van der Putten et al., "Efficient insertion of genes into the mouse germ line via retroviral vectors," Proc. Natl. Acad. Sci. USA, 1985, 82:6148-1652
_	AVVV	Wakayama et al., "Full-term development of mice from enucleated oocytes injected with cumulus cell nuclei," Nature, 1998, 394:369-374
	AWWW	Weiss, "Hot Prospect for New Gene Amplifier," Science, 1991, 254:1292-1293
	AXXX	Wilmut et al., "Viable offspring derived from fetal and adult mammalian cells," Nature, 1997, 385:810-813
	AYYY	Young et al., "Constitutive Bcl-2 expression during immunoglobulin heavy chain-promoted B cell differentiation expands novel precursor B cells," Immunity, 1997, 6(1):23-33
	AZZZ	Zornig et al., "Survival and death of prelymphomatous B-cells from N-myc/bcl-2 double transgenic mice correlates with the regulation of intracellular Ca2+ fluxes," Oncogene, 1995, 11:2165-2174
	AAAAA	

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